

# **I-405 Express Toll Lanes Rate Setting**

**Craig J. Stone, P.E.**

Assistant Secretary  
Toll Division

**Rob Fellows**

Policy and Planning Manager  
Toll Division

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# Presentation Purpose and Agenda

- Provide the FY 2014 rate setting process and schedule
- Introduce decisions needed to establish initial toll rates for I-405 express toll lanes
- For each decision, introduce considerations, policy options, and information we plan to provide
- Provide additional information to support discussion of carpool policy options
- Clarify what additional information is required to support rate setting decisions

# I-405 Express Toll Lanes Rate Setting Milestones

	Milestone
<b>November 2013</b>	Executive Advisory Group report out Kickoff rate setting Present funding and phasing draft findings Discuss carpool and motorcycle policies Clarify rate setting information needs
<b>December 2014</b>	Discuss carpool and motorcycle policies File CR 101
<b>January 2014</b>	Discuss minimum and maximum rates Discuss Pay By Mail differential More discussion on exemptions Identify missing information
<b>February 2014</b>	WSTC proposed rates/exemptions
<b>April 2014</b>	Public Input meetings File CR 102
<b>May 2014</b>	Public Hearing Adopt toll rates/exemptions File CR 103

# Rate Setting Context

- **Rate setting for I-405 express toll lanes is different from traditional toll facilities**
  - Toll rate changes throughout the day based on traffic conditions where the price balances demand for use with space available while maintaining 45 MPH performance 90 percent of the time
  - Average or maximum toll rates may automatically escalate over time due to growth in travel and changing market conditions.
  - Initial segment from Bellevue to Lynnwood is the first phase of a larger eventual system on I-405 and SR 167
  - While the initial segment will not be pledged to bonds in early years, future phases may rely on revenue for financing or pay as you go
- **Precedent set on I-405 will affect future express toll facilities. WSDOT envisions:**
  - A network of express toll lanes replacing HOV lanes
  - Two styles of tolling that remain consistent system-wide:
    - Traditional roads, bridges and tunnel tolls
    - Express toll lanes

# Express Toll Lanes Definition

## RCW 47.56.810 (2)

"Express toll lanes" means one or more high occupancy vehicle lanes of a highway in which the department charges tolls primarily as a means of regulating access to or use of the lanes to maintain travel speed and reliability.

# Rate Setting Actions and Decisions Needed

**Dynamic toll rates are set by a computer program.  
The rate setting process needs to set the framework for  
dynamic tolls, including:**

- Minimum toll rate
- Maximum toll rate
- Pay By Mail differential
- Exemptions

*(Note statute directs transit and vanpools must be exempt on I-405)*

- Emergency vehicles/incident response/maintenance vehicles
- Private buses
- Motorcycles
- Carpools (defined as 2+ or 3+ occupancy)

# Minimum Toll Rate

## Considerations

- Too low = Loss of revenue, doesn't cover collection costs
- Too high = Potential for low usage, revenue during off-peak periods

## Policy Choices

- No minimum toll
- Cover cost of collection
- Generate maximum revenue during uncongested periods
- Financial Analysis Assumption: \$0.75 minimum toll

## Information that will be presented at a future meeting

- Operating assumptions and considerations
- Cost of toll collection per transaction
- Impact on gross and net revenues
- National and local experience

# Maximum Toll Rate

## Considerations

- Too high = May be unacceptable to the public
- Too low = Lanes will become congested. System will switch to HOV-only, resulting in lost revenue and unavailability

## Policy Choices

- Higher maximum that guarantees performance and availability
- Lower maximum with threshold for revisiting if performance suffers
- No maximum toll – let traffic determine rate needed
- Financial Analysis Assumption: No maximum toll

## Information that will be presented at a future meeting

- Operating assumptions and considerations
- Frequency that calculated rate would exceed proposed maximums
- Impact on traffic and revenue
- National and local experience



# Pay By Mail Differential

**Similar to other facilities, non-*Good To Go!* express toll lane customers will be able to Pay By Mail. A higher toll would offset added toll collection costs and losses.**

## **Considerations**

- Consistency with other facilities

## **Policy Choices**

- Fixed differential (*Good To Go!* rate plus a set amount)
- Proportionate differential
- Cover all costs and losses, or exclude losses due to non-payment
- Financial Analysis Assumption: \$1.50 differential (in 2012 dollars)

## **Information that will be presented at a future meeting**

- Toll collection costs and losses per transaction
- Local experience (There is no relevant national experience on express toll facilities)

# Why photo tolling?



- Consistent customer experience
- Everyone can be a customer
- Allows new customers to try express toll lanes before opening an account
- Alternative is photo-enforcement, which requires the same equipment and processes, but sends a violation instead of a bill
- Carpool declaration is required
  - Customers who wish to take advantage of a high-occupancy exemption will need to have a pass or be registered.
  - Not declaring will result in a toll being deducted from the customer's account or a bill being sent in the mail.
- Reduces uncollectable revenue

# Exemptions – In-service vehicles

## Exemptions Common Across Facilities

*Includes:*

- In-service maintenance and incident management vehicles
- In-service emergency vehicles
- On SR 520, in-service tow trucks contracted to perform incident management

## Policy Choices

- Remain consistent with other toll facilities
- Vary from other toll facilities
- Financial Analysis Assumption: None. Not captured in modeling

## Information that will be presented at a future meeting

- National and local experience

# Exemptions – Transit and vanpools

**The I-405 toll authorization statute excludes transit and vanpools from tolls.**

## Considerations

- RCW 47.56.880 Section (1) (c) “Toll charges may not be assessed on transit buses and vanpools.” (I-405 Toll Authorization)

## Policy Choices

- Financial Analysis Assumption: Transit and vanpool toll-exempt

# Exemptions – Private buses

**Privately-operated, regularly-scheduled routes are exempt from tolls on SR 520, a condition of the Lake Washington Urban Partnership agreement.**

## Considerations

- Only affects tolls when operating without passengers (HOV otherwise)
- Consistency with other facilities
- Interpretation needed for RCW 46.61.165  
(allows private buses in transit priority lanes without passengers)

## Policy Choices

- Exempt private buses or do not exempt them
- Financial Analysis Assumption: Private buses treated as 3+ carpools

## Information that will be presented at a future meeting

- Impact on traffic and revenue
- National and local experience

# Exemptions – Motorcycles

## Considerations

- Washington HOV lanes allow motorcycles
- SR 167 HOT lane exempts motorcycles from tolls

## Policy Choices

- Exempt motorcycles
- Do not exempt motorcycles
- Financial Analysis Assumption: Motorcycles are exempt

## Information that will be presented at a future meeting

- Federal and state requirements and policies
- National and local experience
- Traffic and revenue effects
- Safety implications
- Express toll lane capacity impacts

# Exemptions – Carpools

## Considerations

- Carpools will need account, pass to get an exemption
- Project must cover operating costs within 2 years of opening
- Consistency with current and future express toll facilities
- Ability to transition to 3+ in future when/if needed
- Complexity of messaging/education and public acceptance

## Policy Choices

- 3+, 3+ peak / 2+ off-peak, 2+ toll exemptions
- 2+ fixed-rate discount
- No carpool exemption (everybody pays)
- Financial Analysis Assumption: Several options considered

## Executive Advisory Group Recommendations

- Exempt carpools with 3 or more occupants weekday peak periods
- Exempt carpools with 2 or more occupants at other times
- Some EAG members stressed this should be an interim measure, assuming an eventual 3+ definition at some point in the future

# Carpool Policy - Operational Context

- **Account Requirement** – Carpools will require a pre-paid *Good To Go!* account to receive carpool exemptions
  - This is a significant change from SR 167 HOT lanes affecting “casual” or infrequent carpoolers.
- **Declaration Method** – Carpoolers must declare their carpool status to receive an exemption
- **Hours of Operation** – Current assumption is that tolls will be collected between 5AM and 8PM daily, but a longer time span could be set depending on traffic performance
- **Limited access points to enter and exit** – I-405 express toll lanes will have designated locations where access is allowed
  - Similar in concept to current SR 167 operation



# Carpool Policy – State Requirements

**Under RCW 47.56.880 (Authorizing Tolls on I-405), express toll operation must be terminated after two years if the following conditions are not met:**

- Must meet 45 MPH speed at least 90 percent of the time during peak periods
- Must generate sufficient revenues to cover toll operating costs

# Carpool Policy – Federal Requirements

- **MAP-21 directs the Secretary to subject states to “appropriate program sanctions” for HOV or HOT facilities that do not meet 45 MPH speed during 90 percent of peak periods**
  - Performance standard is not new, but included no sanctions for failure
- **Title 23 U.S.C. 166 allows States to toll vehicles for access to HOV lanes only when (1) they do not meet the established occupancy requirements of the lane or (2) they are inherently low emission vehicles or low emission and energy-efficient vehicles.**
- **Other federal considerations:**
  - Environmental commitments – FHWA has advised us that any carpool policy other than 3+ will require a reevaluation of the I-405 express toll lane project NEPA documentation
  - Funding requirements – Federal funds utilized to construct HOV lanes may need to be repaid to FHWA

# Carpool Policy – National Experience

	HOV Policy	Transit/Vanpools Emergency Vehicles	Other Policies
<b>SR 91 Orange County, CA</b>	HOV 3+ toll-free, except EB 4-6 p.m. (50% discount)		Motorcycle, pure zero-emission vehicles included in 3+ policy as “special access accounts”
<b>I-495 Capital Beltway Virginia</b>	3+ toll-free	Buses, emergency vehicles toll-free – pass required	Motorcycles toll-free with no pass required.
<b>I-95 Miami, FL</b>	Pre- registered 3+ carpools toll-free	Vanpools toll-free	Registered hybrids, and all motorcycles toll-free
<b>I-85 Atlanta, GA</b>	HOV 3+ toll-free	Registered transit toll-free	Alternate Fuel Vehicles, and motorcycles toll-free
<b>I-394 Minneapolis, MN</b>	HOV 2+ toll-free	Transit toll-free	Motorcycles toll-free
<b>I-10/I-110 Los Angeles, CA</b>	I-10*: HOV 3+ peak, 2+ off peak toll-free I-110: HOV 2+ all day toll-free * Peak Hours: 5am-9am; 4pm-7pm Operating Hours: 24/7	Buses, vanpools toll-free	Motorcycles toll-free Low-income drivers eligible for a one-time \$25 credit toward initial account funds or tolls

# Carpool Policy – 2012 Focus Group Key Findings

- **Participants want some advantage for 2-person carpools**
  - Half most preferred the All Carpool Discount option with \$1 discount for both 2-person and 3+ person carpools
  - A third of participants most preferred 3+ Carpool Free Peak / 2+ Carpool Free Off-peak. Half of the participants prefer this option as their second choice
- **Some participants like the idea of generating more revenue quickly, but most believe not at the expense of 2-person carpools**
- **Participants who have experience with the SR 167 HOT lanes are more inclined to prefer the 3+ Carpool Free Peak / 2+ Carpool Free Off-peak, and prefer 3+ Carpool Free as their second choice**
  - These participants more clearly understood the advantages of the express toll lanes, and prefer having some type of “free” option for carpoolers (both 3+ and 2-person)

# Carpool Policy – 2013 Survey Key Findings

- **Statistically valid telephone survey of 975 I-405 users**
  - Using random digit dialing and cell phone samples
  - Also included an online survey of vanpoolers from King County Metro and Community Transit
- **Overall scores for I-405 express toll lanes support**  
(using a 1–7 scale with 1=very low support 7=very high support)
  - 41% scored a 1 or 2 indicating very low or low support
  - 27% scored a 6 or 7 indicating high or very high support
- **There was little support for changing the definition of a carpool to 3 or more people**
  - Only 25% of carpool respondents (n=238) would qualify for 3+ carpool definition
- **The majority of respondents offered low or very low support if the definition of a carpool changed by time of day (69% scored 1 or 2)**
- **If all carpools paid a lower toll than a 1-person vehicle, the majority of respondents still offered little to no support (53% scored a 1 or 2)**

# Information to be Provided in December

- **Everyone Pays assessment**
  - Traffic demand and throughput
  - Vehicle occupancy, and total person-throughput
  - Gross and net revenue
- **HOV policy background and context**
- **What other information is needed?**

# For questions or further information...

Craig J. Stone, P.E.  
Assistant Secretary, Toll Division  
206-464-1222 or [StoneC@wsdot.wa.gov](mailto:StoneC@wsdot.wa.gov)